

# Capital Improvement Programming

## INTRODUCTION

Capital improvement programming is a guide toward the efficient and effective provision of public facilities. Programming capital facilities over time can promote better use of the County's limited financial resources and assist in the coordination of public and private development. In addition, the programming process is valuable as a means of coordinating and taking advantage of joint planning and development of facilities where possible. By looking beyond year to year budgeting and projecting what, where, when and how capital investments should be made, capital programming enables public organizations to maintain an effective level of service for both the present and future population.

## THE CAPITAL IMPROVEMENT PROGRAM "CIP"

The result of this continuing programming process is the Capital Improvement Program or CIP, which is the County's five-year roadmap for creating, maintaining and funding present and future infrastructure requirements. The Capital Improvement Program addresses the County's needs relating to the acquisition, expansion, and rehabilitation of long-lived facilities and systems. The CIP serves as a planning instrument to identify needed capital projects and coordinate the financing and timing of improvements in a way that maximizes the return to the public. It provides a planned and programmed approach to utilizing the County's financial resources in the most responsive and efficient manner to meet its service and facility needs. It serves as a "blueprint" for the future of the community and is a dynamic tool, not a static document.

The underlying strategy of the CIP is to plan for land acquisition, construction, and maintenance of public facilities necessary for the safe and efficient provision of public services in accordance with broad policies and objectives adopted in the County's Comprehensive Plan. A critical element of a balanced CIP is the provision of funds to both preserve or enhance existing facilities and provide new assets to respond to changing service needs and community growth. While the program serves as a long range plan, it is reviewed annually and revised based on current circumstances and opportunities. Priorities may be changed due to funding opportunities or circumstances that cause a more rapid deterioration of an asset. Projects may be revised for significant costing variances.

The CIP is primarily a planning document. As such, it is subject to change each year as the needs of the community become more defined and projects move closer to final implementation. The adoption of the Capital Improvement Program is neither a commitment to a particular project nor a limitation to a particular cost. As a basic tool for scheduling anticipated capital projects and capital financing, the CIP is a key element in planning and controlling future debt service requirements. For this reason, the CIP includes some projects where needs have been defined, but specific solutions, and funding amounts, have not been identified.

When adopted the CIP provides the framework for the County Executive and the County Board of Supervisors with respect to bond sales, investment planning, and project planning. Fairfax County's CIP includes not only a 5-year plan, but a future outlook including a glance at the potential long term requirements beyond this 5 year period.

## CIP LINKAGES

The comprehensive capital project planning process has three essential components:

- The Comprehensive Plan (Long-term Element, 20-25 years)
- The Capital Improvement Program (Mid-term Element, 5-10 years)
- The Capital Budget (Short-term Element, 1 year)

The Comprehensive Plan is a component of the planning process, or a generalized model of the future which expresses policy directions for a 20-25 year period. The CIP and the Comprehensive Plan are mutually supportive; the Plan identifies those areas suitable for development and the public investment they will require. The CIP translates these requirements into capital projects designed to support the goals and policies of the Comprehensive Plan. This ensures that necessary public facilities are planned in a concurrent time frame with private development. By providing a realistic schedule for the provision of facilities, orderly development in the best interest of the citizens of Fairfax County, can be achieved.

Many projects recommended for implementation in the Plan are not included in the five-year CIP period, but may be incorporated into the CIP as existing needs are met and additional growth occurs. The extent to which growth does or does not occur in a given area will influence both the timing and scope of capital projects. While it is a desired goal to minimize public facility deficiencies, it is equally desirable that only those projects with an identified need will be constructed.

The Annual Capital Budget serves to appropriate funds for specific facilities, equipment and improvements. The first year included in the CIP reflects the approved annual capital budget funding levels. Projects slated for subsequent years in the program are approved on a planning basis only and do not receive ultimate expenditure authority until they are eventually incorporated into the annual Capital Budget. The CIP is a "rolling" process and subsequent year items in the CIP are evaluated annually and advanced each fiscal year.

### **THE LEGAL BASIS FOR THE CIP**

The CIP is prepared pursuant to Article 5 of Section 15.2-2239 of the Code of Virginia, as amended, which reads:

"A local commission may, and at the direction of the governing body shall, prepare and revise annually a capital improvement program based on the comprehensive plan of the locality for a period not to exceed the ensuing five years. The commission shall submit the program annually to the governing body or to the chief administrative officer or other official charged with preparation of the budget for the locality, as such time as it or he shall direct. The capital improvement program shall include the commission's recommendations and estimates of costs of such facilities and the means of financing them, to be undertaken in the ensuing fiscal year and in a period not to exceed the next four years, at the basis of the capital budget for the locality. In the preparation of its capital budget recommendations, the commission shall consult with the chief administrative officer or other executive head of the government of the locality, the heads of departments, and interested citizens and organizations, and shall hold such public hearings as it deems necessary."

### **THE CIP PROCESS**

The capital program and budget is the result of an ongoing infrastructure planning process. Infrastructure planning decisions must be made with regard to both existing and new facilities and equipment. For existing facilities, the planning process addresses appropriate capital renewal strategies and repair versus replacement of facilities. New service demands are also considered since they often affect capital facility requirements. Planning for the five-year Capital Improvement Program period and the subsequent 5 years includes linking the Public Facilities Plan portion of the Comprehensive Plan to the capital requirements, conducting needs assessments and allowing for flexibility to take advantage of opportunities for capital investment. The CIP is developed using the following Principles of Capital Improvement Planning.

## **Principles of Sound Capital Improvement Planning**

1. The Board of Supervisors' goals and the adopted Comprehensive Plan, specifically the Land Use Plan and the Policy Plan, are the basis for capital planning in Fairfax County. The Capital Improvement Program (CIP) shall execute the goals and objectives of the adopted Comprehensive Plan for Fairfax County.
2. Pursuant to Section 15.2-2239 of the Code of Virginia, the Planning Commission shall review and recommend annually the County's Capital Improvement Program based on the adopted Comprehensive Plan for the consideration of the governing body.
3. Public participation in the CIP process is essential and shall continue to be encouraged.
4. Criteria consistent with the Comprehensive Plan and with the principles stated herein, shall be established to guide the selection and prioritization of CIP projects.
5. The development of the CIP shall be guided by the principles of life cycle planning to ensure that long-term maintenance, renewal and replacement requirements are adequately addressed to protect the County's investment and maximize the useful life of facilities. The County shall allocate an appropriate amount of its general operating, special revenue, enterprise, and other funds to finance ongoing infrastructure maintenance, renewal and replacement of facilities. Facilities are defined to include all fixed installations constructed and/or maintained with public funds including buildings and structures, utilities, and related improvements.
6. The CIP shall include the fiscal impact of each project and identify unfunded capital requirements to adequately anticipate resource requirements and capacity to provide services beyond the planning period.
7. The CIP shall support the County's efforts to promote economic vitality and high quality of life. The CIP should recognize the revenue generating and/or cost avoiding value of making public infrastructure improvements to spur private reinvestment and revitalization in support of County land use policy.
8. The CIP shall be developed to provide facilities that are cost effective, consistent with appropriate best practice standards, community standards and expectations of useful life.
9. The County will endeavor to execute the projects as approved and scheduled in the CIP. Value Engineering principles will continue to be applied to appropriate capital projects. Changes in project scope, cost and scheduling will be subject to close scrutiny.
10. The CIP shall be guided by the County's adopted Ten Principles of Sound Financial Management.

## **THE CIP REVIEW TEAM**

A CIP Review team is responsible for annually reviewing capital project requests and providing recommendations to the County Executive. This team is comprised of technical staff from the Office of the County Executive, Department of Management and Budget, Department of Planning and Zoning and the Department of Public Works and Environmental Services. This team also conducts an in-depth analysis of the impact of the Capital Program on cash flow and bonding requirements, as well as the County's ability to finance, process, design and ultimately maintain projects. The committee meets regularly throughout the year.

The overall goal of the CIP Review Team is to develop CIP recommendations that:

- ✓ Preserve the past, by investing in the continued upgrade of County assets and infrastructure,
- ✓ Protect the present with improvements of County facilities; and
- ✓ Plan for the future.

Projects most often are forwarded to the team by a sponsoring department, which is responsible for their implementation. Being aware that there are always more project proposals submitted than can be funded in the 5 year period, the team conducts an internal project ranking process. The criteria used in this internal ranking include, but are not limited to, public health and safety, federal or state mandates, preservation of the County's existing capital investment, alleviation of overcrowding, demand for services and consistency with the Comprehensive Plan. While project ratings are important in determining recommended priorities, the realities of the County's financial situation are critical to all decisions.

## Criteria for Recommending Capital Projects

The following criteria shall be applied to future capital projects in order to establish a relative priority for beginning and completing projects. These criteria are intended to guide decision making and may be adjusted as necessary.

All capital projects must support the goals established by the Board of Supervisors and the adopted Comprehensive Plan and conform to specified standards mentioned in the Plan. Other County or best practice standards may be cited so long as they are not in conflict with the Comprehensive Plan or Board directives.

All capital projects will be categorized based on priority and recommended for appropriate funding sources (i.e., general funds, bonds, special revenue funds, other funds) according to their criticality or other standards as recommended by the staff, School Board, Planning Commission or other advisory body.

All new projects recommended to be included in the five-year Capital Improvement Program will be categorized by priority using the criteria listed below. Actual project commencement and completion are subject to identification of resources and annual appropriation by the Board of Supervisors.

**1**

**Immediate:** *Projects are in progress or expected to be started within a year.*

Examples of such projects may exhibit the following criteria:

- Eliminate an immediate threat to personal and public safety.
- Alleviate immediate threats to property or the environment.
- Respond to a court order or comply with approved federal or state legislation.

**2**

**Near Term:** *Projects are expected to start within the next 2–3 years.*

Examples of such projects may exhibit the following criteria:

- Have significant Federal or State commitment.
- Preserve existing resources or realize significant return on investment.
- Preserve previous capital investment or restore capital facilities to adequate operating condition.
- Respond to federal or state mandates in compliance with extended implementation schedules.
- Generate significant revenue, are self supporting or generate cost avoidance (return on investment and/or improved efficiency).
- Alleviate existing overcrowded conditions that directly contribute to the deterioration of quality public services.
- Generate private reinvestment and revitalization.

**3**

**Long Term:** *Projects are expected to begin within the next 4–5 years.*

Examples of such projects may exhibit the following criteria:

- Accommodate projected increases in demand for public services and facilities.
- Maintain support for public services identified by citizens or appointed Boards and Commissions as a priority in furtherance of the goals and objectives established by the Comprehensive Plan.
- Meet new program goals or respond to new technology.
- Fulfill long term plans to preserve capital investments.

**4**

**Future Projects:** *Projects that are anticipated, but not scheduled within the five-year planning period.*

In proposing a five year capital plan, the CIP Team considers the feasibility of all proposed capital projects, evaluating their necessity, priority, location, cost and method of financing, availability of federal and state aid and the necessary investment in the County's infrastructure.

A series of meetings are conducted in the fall to allow County agencies the opportunity to present their program needs to the CIP Review Team. Agencies present their program requirements, demonstrating clear links to the Comprehensive Plan. Agencies have the opportunity to justify new and long term project requests and discuss operational needs and priorities. Several evaluation questions are discussed throughout this process including:

## **Capital Project Evaluation Questions**

### Project Urgency

- What are the most urgent projects and why?
- Is the project needed to respond to state or federal mandates?
- Will the project improve unsatisfactory environmental, health and safety conditions?
- What will happen if the project is not built?
- Does the project accommodate increases in demand for service?

### Project Readiness

- Are project-related research and planning completed?
- Are all approvals, permits or similar requirements ready?
- Have affected citizens received notice and briefings?
- Are the appropriate departments ready to move on the project?
- Is the project compatible with the implementation of the other proposed projects?

### Project Phasing

- Is the project suitable for separating into different phases?
- Is the project timing affected because funds are not readily available from outside sources?
- Does the project have a net impact on the operating budget and on which Fiscal Years?
- Does the project preserve previous capital investments or restore a capital facility to adequate operating condition?

### Planning Questions

- Is the project consistent with the Comprehensive Plan?
- Does the project increase the efficiency of the service delivery?
- What are the number and types of persons likely to benefit from the project?
- Will any groups be adversely affected by the project?
- What geographic areas does the project serve?
- Are there any operational service changes that could affect the development of project cost estimates?

As capital projects are identified, the above evaluation questions are used as an assessment tool in concert with the *Criteria for Recommending Future Capital Projects* regarding the immediate, near term, long term or future timing of project implementation.

Recommendations for the appropriate funding and phasing of projects are coordinated with the respective agencies and the County Executive's Office and an Advertised Program is developed. The Advertised Capital Improvement Program is presented to the Fairfax County Planning Commission in March at which time a workshop with agencies and public hearings are held. After completing its review of the Program, the Planning Commission forwards its recommendations to the Board of Supervisors for consideration. The Board of Supervisors holds public hearings on the Advertised CIP in April, concurrent with the County's Annual Budget hearings, then adjusts and adopts the Program.

## THE CIP CALENDAR

September/October	Departments prepare CIP requests
November	Departmental Meetings with CIP Review Team
December	Recommendations discussed with County Executive
January	Recommendations discussed with Board of Supervisors
February	Advertised CIP released with Annual Budget
March	Presentations and Public Comment to Planning Commission
April	Public Comment and CIP Adoption

### ORGANIZATION OF THE CIP

The Fairfax County Capital Improvement Program includes several summary and planning charts contained in the Fiscal Policies and Summary Charts section. In addition, the CIP includes a comprehensive listing of all projects as well as information by functional program area. The majority of the CIP is contained in the functional program areas which provide detailed description of the current capital programs in Fairfax County.

#### **Fiscal Policies and Summary Charts**

This section includes: a Summary of the Current 5-year Capital Program, a status of the bonds authorized by the voters which support the current program, a Debt Capacity Chart, County and School bond referendum capacity charts, a history chart depicting the last 20 years of bond referendum, and a Summary of the 5-year Pay-as-You-Go Program. All of these charts enable the CIP to be a more effective planning tool and help depict the resources both available and required to support the County's project needs.

#### **Project Lists**

For the first time, the CIP includes a comprehensive listing of all projects contained in the 5-year CIP period and beyond by priority ranking. This ranking is based on the criteria adopted by the Board of Supervisors as part of the FY 2003 CIP. These criteria were used to develop a priority ranking of all existing and future CIP projects. Application of these criteria ensures that each project recommended for Board consideration does indeed support the policy objectives of the Comprehensive Plan and identifies a basis for scheduling and allocation of resources. The project list is available by criteria ranking and by Supervisory District. For each potential project beyond the 5-year period a cost estimate has been developed. Cost estimates for long term CIP projects are based on preliminary project descriptions provided by the requesting agency, and include all estimated costs for land acquisition, permits and inspections, project management and project engineering, consultant design, construction, utilities, fixed equipment, and information technology infrastructure. No preliminary scoping and concept work has been completed for these projects and estimates are in today's dollars. Therefore, each estimate is considered an Estimate - No Scope, No Inflation (ENSNI).

#### **Functional Program Areas**

Each functional area contains an introduction including: Program Goals, a five year funding summary of the program area and a graph depicting the sources of funding supporting the functional area. Within each functional area, separate sections denote current initiatives and issues, links to the Comprehensive Plan, and specific project descriptions and justification statements.

Because of the length of time required to plan, design, and construct the capital projects, the Capital Program encompasses historic and anticipated future costs for each project. Specifically identified are the costs for the current fiscal year (the Capital Budget), and anticipated costs for each of the four succeeding fiscal years. These five years, coupled with the historic expenditures and anticipated costs to be incurred in the subsequent five years, provide the total estimated cost of each project.

Following the project descriptions and justification statements, a project chart has been included which depicts each project's timeline in terms of land acquisition, design and construction. These funding schedules indicate the total cost of each project and the amounts scheduled over the five year CIP period. In addition, these tables show a recommended source of funding for each project. Many of the functional program areas also contain a County map which locates projects with a selected or fixed site. When reviewing the CIP it is important to note the various stages of a capital project prior and following to its inclusion in the CIP.

## **EVOLUTION OF A CAPITAL PROJECT**

The following diagram depicts the evolution of a capital project from inception, to approval in the CIP, to construction completion. Project concepts and facility planning are developed in response to need and identification in the Comprehensive Plan. In addition, projects can be initiated by citizen groups or the Board of Supervisors. Capital project requests are submitted by County agencies and reviewed by the CIP team, the County Executive, the Planning Commission and the Board of Supervisors. Once a project has been included in the CIP and approved in the annual budget the following phases are executed:

Project Development: The County identifies project requirements, and defines a project's work scope by conducting feasibility studies, data collection, preliminary design, cost estimates, and assessments of alternatives.

Land Acquisition: Alternative sites are evaluated and acquisition of land occurs. Costs incurred include purchase, easements and right-of-way costs. This can also include surveys, appraisals, environmental audits, permitting, legal costs, maps, charts, aerial photography, and other costs.

Design Phases: Architectural Consulting, Schematic Design, Design Development: Programmatic review and negotiations are conducted with architect consultants. The design of the project is initiated in accordance with the scope of work set forth in the project development phase. These phases include professional consultant work, legal and technical documentation, constructability review, data collection, advertising, assessment of alternatives related to project design, construction management services, and bid reviews. Before construction can occur, many projects will require review at various County levels to establish the extent and exact location of the facility. This review in some cases involves a public hearing before the County Planning Commission under the County's 2232 Review process to determine the project's compatibility with the County's adopted Comprehensive Plan. After this review stage the specific requirements and details of each project can be finalized.

Construction Phases: This phase includes all construction related tasks required to place a project in service. This may include final design, project construction contracts, professional and technical assistance, advertising, legal and technical documentation costs, inspection, testing, permitting, and utility coordination. At the conclusion of these phases, the project is complete and ready for operation.

County staff administer all of these project phases including in-house project management, contract supervision, technical reviews, construction management, construction inspection, technical specifications surveying and mapping.



# Capital Improvement Program

## Evolution of Projects

